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In this number :
Saving and investment in transition countries

SAVING AND INVESTMENT IN TRANSITION COUNTRIES

Recent trends, prospects and policy issues

This issue of Supplement A describes and attempts to explain the sharp decline experienced by saving and investment ratios in the transition countries of Central and Eastern Europe and the former Soviet Union since 1989. It also looks at the issue of whether transition countries' external financing needs will exert additional pressures on international capital markets in the future. It is argued that, although external capital will continue to play an important role in the transition process, the future recovery of investment rates in these countries is likely to be financed mostly by an increase in domestic saving, particularly corporate saving. This is consistent with the high correlations between national saving and investment rates generally found by the empirical literature, and with the fact that the recent recovery of corporate investment in the most advanced Central European countries is being largely self–financed through an improvement in enterprise profitability.

The Supplement concludes with some policy recommendations for increasing the level and improving the allocation of saving in transition countries. These recommendations include : pursuing policies conducive to a stable macroeconomic environment and sustainable growth; increasing public saving; reforming the pay–as–you–go public pension systems while developing complementary private schemes based on the principle of full funding; proceeding with the restructuring of the banking systems; and developing the capital markets. Transition countries should think twice before adopting any tax reform aimed at encouraging household saving. As the experience of other countries suggests, while the impact of tax incentives on household saving is at best moderate and of a medium–term nature, their fiscal costs can be important.

EXECUTIVE SUMMARY

1. **Under the socialist system, the countries of Central and Eastern Europe and the former Soviet Union displayed very high saving and investment ratios by international standards. Since they began their pro–market reforms, however, practically all transition countries (TC) have suffered a sharp decline in their saving/GDP and investment/GDP ratios.** Investment ratios have fallen from an average of more than 32% in the period 1977–88 to an average of about 20% in 1994. Saving ratios have fallen by even more, thus leading to a deterioration in the aggregate current account of the region. The average saving ratio declined from around 32% in 1977–88 to 17% of GDP in 1994, well below a world average of 21.4% of GDP.

2. **The collapse of saving ratios is explained by the decline in enterprise and public saving. In many countries public saving has turned negative.** The contraction of public saving has normally been translated into substantial increases of the public deficits, despite the fact that public investment has also fallen in most countries. This has been particularly true in Bulgaria, Albania and the New Independent States. The only countries that have avoided this fiscal deterioration are the Czech Republic, Slovenia and the Baltic states.

3. **By contrast, partial statistical information on household income and expenditure suggest that household saving ratios are recovering from their very depressed pre–transition levels.** The end of the paternalistic protection provided by the socialist state against personal mishaps, the uncertainty associated with the transition process, increased income inequality and a growing choice of financial and real assets where households may place their savings are among the pos–sible factors explaining the recovery of household saving ratios.

4. **The decline in investment/GDP ratios is explained by the reduction of corporate investment and, to a lesser extent, public investment.** To the usual negative impact of recession on enterprise investment has been added the negative implications of transition itself (increased economic and political uncertainty, "pre–privatization agony"). In spite of the important decline in public investment/GDP ratios, however, these ratios remain in TC on average at approximately the levels seen in industrial countries (about 3.7% of GDP in 1994).

5. **Saving in TC not only has fallen abruptly but is to a large extent allocated inefficiently**. In a large number of countries the scarce pool of private saving is mostly absorbed by the state to finance its public investment and its dissaving, resulting in the crowding out of private investment. Furthermore, the small part that is not absorbed by the state is often channeled by weak, non–competitive and largely state–controlled banking systems to loss–making enterprises and sectors.

6. **In recent years both economic studies and statements by policy–makers have warned about the risk that the combination of low saving ratios and huge investment needs in TC may significantly add to upward pressures on global real interest rates in the coming years. This Supplement argues that this danger is probably overstated.** First, the likely increase in investment demand in TC has been exaggerated (many estimates have been based on unrealistic catching–up with the West scenarios and have tended to confuse investment needs with actual investment demand). Second, there has been a failure to recognize the capacity of TC's domestic saving rates to recover as their economies strengthen and restructuring proceeds.

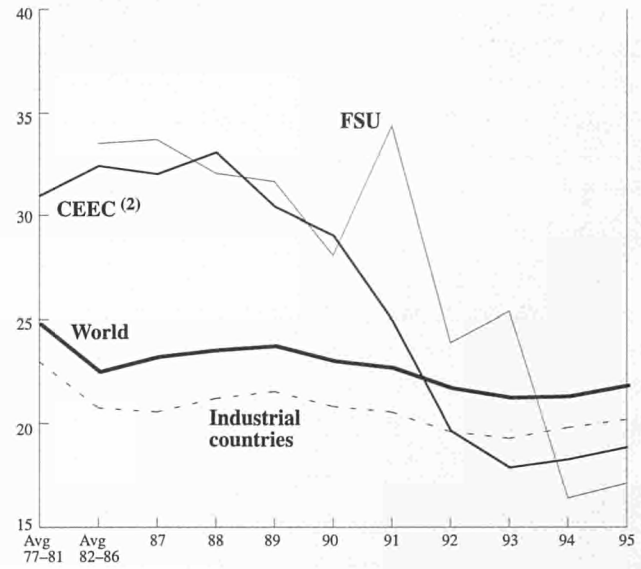
7. **While external capital is playing and will continue to play in the future an important role in the transition process**, the experience of other countries (including the high correlations between national saving and investment rates generally found by the empirical literature) suggests that **the future recovery of investment ratios in TC is likely to be mostly financed by an increase in domestic saving, particularly corporate saving**. This is also what the latest Commission macroeconomic forecasts for the associated countries and the latest projections contained in the IMF World Economic Outlook imply. Moreover, it is consistent with the fact that the recent recovery of corporate investment in the most advanced Central European countries (Czech Republic, Poland and Hungary) has been largely self–financed through an improvement in enterprise profitability.

8. The Supplement concludes with the following **policy recommendations** for increasing the level and improving the allocation of saving in TC:

   General policy measures: TC should pursue policies conducive to a stable macroeconomic framework and sustainable growth. Empirical evidence shows that high economic growth leads to higher national saving ratios, and that developing countries that managed to keep low rates of inflation and foreign debt have tended to display higher national saving ratios, to receive more foreign direct investment and to enjoy better access to the international capital markets.

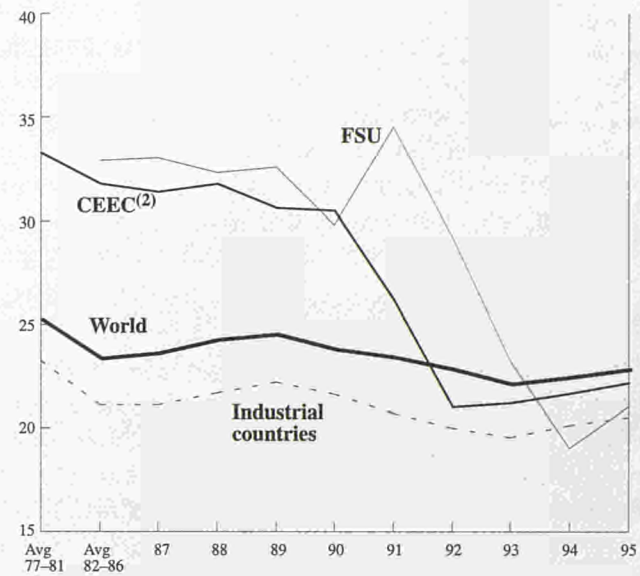
   Monetary policy measures: By suring (in combination with interest rate liberalization) a sufficiently attractive real remuneration for depositors, monetary policy may also directly increase private saving and can prevent the channelling of domestic saving abroad or to informal, and less efficient, domestic financial markets.

GRAPH 1 : **Aggregate saving/GDP ratios** (1)



(1) Data for 1994 and 1995 are forecasts.
(2) Central and Eastern European countries excluding Russia, Belarus and Ukraine.
Sources : IMF (1994). For the FSU, tentative estimate by the IMF staff.

GRAPH 2 : **Aggregate investment/GDP ratios** (1)



(1) Data for 1994 and 1995 are forecasts.
(2) Central and Eastern European countries excluding Russia, Belarus and Ukraine.
Sources : IMF (1994). For FSU, tentative estimates by the IMF staff.

***Fiscal measures*:** Increasing public saving (particularly if achieved through cuts in current expenditures rather than tax increases) is the safest and most direct way in which the authorities in TC can have a positive impact on aggregate saving. As the experience of other countries shows, governments in TC should be extremely careful with the short–term fiscal costs of any tax reform aimed at encouraging household saving, and should avoid granting tax incentives (interest deductibility) for consumer borrowing (except perhaps in the case of house mortgages). Given the recent and expected increase in old–age dependency ratios, TC should reform and downsize their current, pay–as–you–go public pension systems and develop complementary private schemes based on the principle of full funding.

***Financial sector measures*:** Recapitalizing and strengthening the balance–sheets of commercial banks and increasing competition among them would stimulate both saving and investment by allowing a reduction in their large lending–deposit spreads. Stronger, more efficient and less–state controlled banking sectors would also improve the allocation of saving among alternative investment projects and borrowers. Over the medium run, this would tend to increase corporate saving by eliminating the implicit subsidization of loss–making enterprises through the roll–over of non–performing loans and by facilitating the emergence of high–profit enterprises in the new private sector. The development of capital markets can also have positive implications for the level of household saving and for the allocation of saving.

I. SAVING AND INVESTMENT UNDER THE SOCIALIST SYSTEM

Under the socialist system, national saving and investment were basically targeted by the government as part of the country's overall economic plan. Most saving took place within the government–enterprise sector, through direct and indirect taxation and retained earnings of enterprises. Household saving also contributed to national saving but that contribution was normally small[1]. The decision over how much of society's output should be consumed and how much should be saved and invested in order to increase future consumption was one of the most important decisions made by central planners.

By centrally setting both output prices and the costs of production, the planners determined the profits of the state–owned enterprises. The government also decided how much of these profits could be retained by the enterprises to self–finance their investment and how much would be transferred to the state (via taxes or profit remittances) to finance public consumption, direct investment by the state or capital grants from the state to other enterprises. The state budget thus played a central role also in the mobilization of saving and its transformation into investment.

By contrast, in market economies national saving is mostly the result of the individual and decentralized decisions of households and enterprises. The private sector generates

1 Household saving in Hungary, for example, represented on average in the period 1985–89 less than 5% of GDP (see table 1).

TABLE 1 : **Saving and investment ratios : "Central Europe"** (in percent of GDP)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994(3)
Albania										
Saving	27.5	29.9	27.4	24.9	27.5	19.7	–13	–55	–18	–4
Government	–	–	–	–	–	–	–27	–24	–12	–5
Non–government (1)	–	–	–	–	–	–	14	–32	–6	1
Investment	30.4	30.9	28.4	28.9	31.7	28.9	6.1	5.1	14	15
Government	–	–	–	–	–	–	6	4	8	8
Non–government (1)	–	–	–	–	–	–	0	1	6	7
Bulgaria										
Saving	30.7	32	29.3	30.5	27.1	23.5	22.5	10.6	8.1	11.2
Government	–	7.4	7.9	4.7	4.1	–5.6	–6.6	–4.3	–11.7	–5
Non–government (1)	–	24.6	21.4	25.8	23	29.1	29.1	14.9	19.8	16.2
Investment	31	34.9	32	34.2	33.1	28.9	27.9	19.7	15.8	19.3
Government	–	10	12	8.1	6.9	3.1	2	2.7	1.9	1.7
Non–government (1)	–	24.9	20	26.1	26.2	25.8	25.9	17	13.9	17.6
Former CSFR										
Saving	29.9	29.8	29.1	29.5	29.5	28	29.6	23.7	–	–
Government	–	–	–	6.4	5.7	6.6	6.4	7.7	–	–
Non–government (1)	–	–	–	23.1	23.8	21.4	23.2	16	–	–
Investment	27.5	28.9	27.8	26.6	27.7	30.7	26.8	23.1	–	–
Government	–	–	–	8.6	6.2	6.1	5.6	6.5	–	–
Non–government (1)	–	–	–	18	21.5	24.6	21.2	16.6	–	–
Czech Republic										
Saving	–	–	–	–	–	–	–	–	19.2	21.8
Government	–	–	–	–	–	–	–	–	4.8	3.1
Non–government (1)	–	–	–	–	–	–	–	–	14.4	18.7
Investment	–	–	–	–	–	–	–	–	17.8	22.5
Government	–	–	–	–	–	–	–	–	4.2	4.9
Non–government (1)	–	–	–	–	–	–	–	–	13.6	17.6
Slovak Republic										
Saving	–	–	–	–	–	–	–	–	18	22.3
Government	–	–	–	–	–	–	–	–	–3.3	0.3
Non–government (1)	–	–	–	–	–	–	–	–	21.3	20.7
Investment	–	–	–	–	–	–	–	–	21.9	17.1
Government	–	–	–	–	–	–	–	–	4.1	4.2
Non–government (1)	–	–	–	–	–	–	–	–	17.7	12.9
Hungary										
Saving	22.7	21.8	23.3	24	23.7	27.2	18.1	19.1	13.9	13.7
Government	5.8	4.9	4.5	7.5	5.2	5.1	3.9	1.6	–1.1	–3.9
Enterprises	11.8	11.2	14.4	11.4	13.9	14	1.5	6.7	9.9	11.9
Households	5.1	5.7	4.4	5	4.6	8.1	12.7	10.8	5.1	5.7
Investment	25	26.9	26.7	25	26.1	24	20.8	19.5	23.1	22.9
Government	6.9	6.5	6	6.2	5.9	3.6	4.4	6.3	4.7	4.1
Enterprises	13.7	15.7	16.5	14.3	15.6	17.4	12.4	10.2	15.7	16.2
Households	4.4	4.8	4.2	4.9	5.2	4.5	3.8	3	2.7	2.6
Poland										
Saving	26	27.6	27.9	32.1	26	28.6	17.3	14.9	13.8	14.2
Government	–	–	4.3	2.8	–2.8	3.4	–5.1	–4.3	–0.6	–1.4
Non–government (1)	–	–	23.6	29.3	28.8	25.2	22.4	19.1	14.4	15.6
Investment	27.7	28.9	28.8	32.6	28.7	27.5	19.9	15.2	16.4	16.6
Government	–	–	5.1	4.6	4	3.6	4.1	3.7	3.4	3.2
Non–government (1)	–	–	23.7	28	24.7	23.9	15.8	11.4	13	13.4
Romania										
Saving	37.3	38.2	36.2	37.9	31.3	21.7	24.7	22.9	24.5	23.5
Government	–	–	–	–	–	8.6	3.6	0.5	4	3.6
Non–government (1)	–	–	–	–	–	13.1	21.1	22.4	20.5	19.9
Investment	33	34.4	31.8	28.4	25.8	30.2	28	31.2	29.3	24.4
Government	–	–	–	–	–	7.7	6	5.8	4.3	5.7
Non–government (1)	–	–	–	–	–	22.5	22	25.4	25	18.7
Former Yugoslavia										
Saving	42.5	41.7	40.7	42.3	40	33.5	29.6	–	–	–
Investment	40.6	39.8	38.9	38.2	37.5	35	30	–	–	–
Weighted average "Central Europe"										
Saving	30.1	30.8	30.2	32.3	28.7	27.3	22.5	17.5	15.5	16.6
Government	–	–	5.1	4.7	1.6	3.8	–0.6	–0.4	–0.9	–0.7
Non–government (1)	–	–	25.1	27.6	27.2	23.6	23.1	18.0	16.4	17.3
Investment	29.8	31.3	30.2	30.9	29.4	29.0	24.3	20.2	17.4	17.1
Government	–	–	6.7	6.4	5.3	4.6	4.4	4.8	3.4	3.6
Non–government (1)	–	–	23.5	24.5	24.1	24.4	19.9	15.4	13.9	13.6

(1) Obtained as a residual.
(2) Data from other sources suggest that stock accumulation, and therefore total investment, is substatially overstated in the Romanian.
(3) Forecasts.
Sources: IMF, World Bank and national statistics.

the bulk of national saving, with government saving normally being small (or often negative) and primarily motivated by the desire to avoid excessive budget deficits. In capitalist economies a much greater proportion of national income is distributed to households and, therefore, a larger share of national saving is accumulated in the household sector. Most saving is intermediated by the financial system, instead of by the state budget as it was the case in socialist economies.

As it is well known, the authorities' desire for a rapid rate of economic growth led centrally–planned economies to sustain very high saving and investment rates by international standards[2]. Saving and investment in the countries of Central and Eastern Europe and the former Soviet Union are estimated to have been on average in the order of 32% of GDP in the period 1977–1988. This compares with a world average of about 24% of GDP and an average of 21.5% in the industrial countries over the same period. Saving and investment rates in socialist countries substantially exceeded the world averages, reaching in some cases record levels of about 40% of GDP (see tables 1 and 2).

TABLE 2 : **Saving and investment ratios. Former Soviet Union(1)** (in percent of GDP)

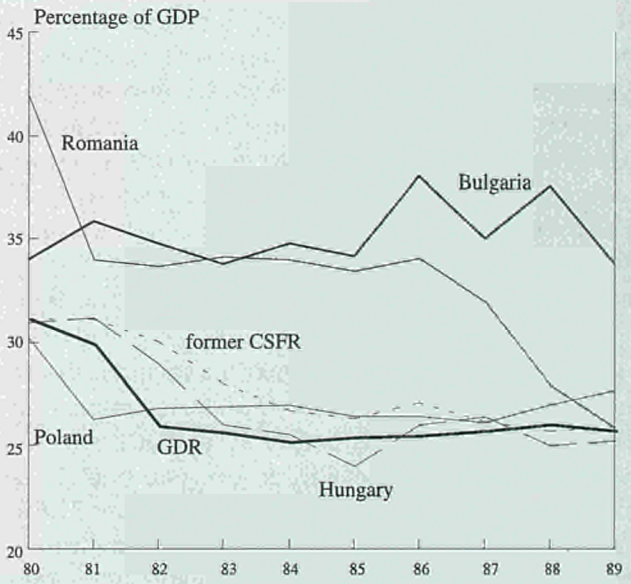
	Avg 1980–89	1990	1991	1992	1993	1994
Estonia						
Saving	–	30.3	22.3	26.4	25.5	20.8
Government	–	–	3.8	1.5	1.8	1.5
Non–government(2)	–	–	18.5	24.9	23.7	19.3
Investment	–	35.1	22.4	27.7	26.2	26.2
Government	–	–	3.1	1.3	2.1	2
Non–government(2)	–	–	19.3	26.4	24.1	24.2
Latvia						
Saving	–	31.8	33.1	26.8	21.8	15.7
Government	–	–	–	1.4	2	0.1
Non–government(2)	–	–	–	25.4	19.8	15.6
Investment	–	35	35	25.2	13.4	19.4
Government	–	–	–	1.5	1.1	2
Non–government(2)	–	–	–	23.7	12.3	17.4
Lithuania						
Saving	–	37.6	34.6	25.5	12.5	12.9
Government	–	7.4	7.7	4.7	4	1.6
Non–government(2)	–	30.2	26.9	20.8	8.5	11.3
Investment	–	38	34.3	22.2	15	18
Government	–	4	2.8	2.6	2.6	3.4
Non–government(2)	–	34	31.5	19.6	12.4	14.6
Russia						
Saving	–	29.4	39.8	30.1	29.8	18
Government	–	–	–	–16	–4.5	–5.1
Non–government(2)	–	–	–	46.1	34.3	24.1
Investment	–	30.2	39.1	35.4	25.8	19.2
Government	–	–	–	4.5	4	3.8
Non–government(2)	–	–	–	30.9	21.8	16.3
Former Soviet Union						
Saving	33.3	28.1	34.4	23.9	25.4	16.4
Investment	32.3	29.8	34.5	29.2	23.2	19

(1) Tentative estimates.
(2) Derived as a residual.
Sources: IMF and World Bank.

Saving and investment ratios in socialist countries were similar to those seen in countries that have been able to sustain strong growth in the post–World War II period. Thus, the most successful South Asian economies or Japan, for example, are used to saving and investment ratios of about 30% and higher. However, the efficiency of the investment undertaken by socialist economies was low since investments were normally not made on the basis of profitability but determined by the objectives of the central plan, the bargaining power of the different enterprises, and other non–market criteria.

The investment ratio in Central European countries seems to have begun declining during the 1980s, that is, even before the collapse of the communist regimes. Thus, graph 3, taken from Ickes (1993), shows a consistent reduction in all the major Central European countries (except Bulgaria) between 1980 and 1989. Furthermore, Ickes notes that not only the investment ratio but the also efficiency of investment fell during the 1980s. Why did saving and investment ratios in Central Europe began to fall in the 1980s? Ickes notes three possible factors. The first is the growing contacts with the West which may have increased households' consumption aspirations and, therefore, the political cost for planners of postponing consumption. This cost was probably reinforced by the emergence of an internal political opposition (exemplified by the birth of Solidarity in Poland in 1980) and the associated weakening of the communist regimes. Finally, the low and declining return on investment may have convinced the socialist planners that it was not worth maintaining such high investment ratios. The recognition that those high rates of saving and investment were not producing the expected results in terms of economic performance was in fact one main motivation for economic reform in the former socialist countries.

GRAPH 3 : **Investment ratios in selected Central European countries during the 1980s (1)**



(1) Data not strictly comparable with those shown in table 1.
Source : Ickes (1993).

2 Kornai (1992; pp.160–70) discusses the ideological, political and institutional motivations behind the high saving and investment rates that were observed in socialist countries.

II. RECENT TRENDS IN SAVING AND INVESTMENT IN TRANSITION COUNTRIES

Describing trends in saving and investment in transition economies is a task fraught with statistical difficulties. For most countries, there are no reliable historical national account series on saving and investment. Where recent and reliable data do exist, they are not easily comparable with the pre–transition statistics. Adequate breakdowns by sector (government, household, and enterprise) are normally not available. The statistical deficiencies are particularly serious for the republics of the former Soviet Union (FSU). The data analysed in this paper, therefore, are in most cases rough approximations or estimates and have to be taken with extreme caution. Having said that, the trends suggested by the data are dramatic enough to be able to draw some tentative conclusions.

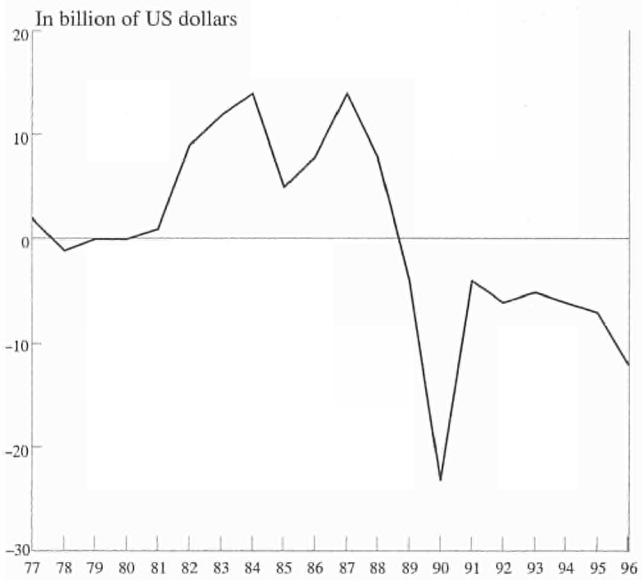
The main sources of the data used in the paper are the IMF (both the aggregate data published in the World Economic Outlooks and more detailed, but often tentative, estimates provided by the staff of the IMF), the World Bank, the EBRD and the different national authorities. For a number of countries, basic sectoral breakdowns distinguishing government from non–government saving and investment have been tentatively estimated by using fiscal data to obtain public saving and investment and deriving non–government saving and investment as residuals.

II.1) Aggregate saving, aggregate investment and current account balances.

The trend towards a decline in national saving and investment ratios that socialist economies seem to have experienced during the 1980s accelerated after they began implementing market–oriented reforms. As graph 1 indicates, the estimated average saving/GDP ratio of the *Central and Eastern European countries (CEEC*[3]*)* fell from 33.1% in 1988 to only 17.9% in 1993, a ratio below the world average in that year (21.3%). The average investment/GDP ratio, for its part, is estimated to have declined from 31.8% in 1988 to 21.2% in 1993 (see graph 2). Since saving has on average declined even faster than investment, the saving–investment balance of the region, an approximation of the current account balance, has deteriorated (on average by 4.6 percentage points of GDP over the period), moving from a 1.3% surplus in 1988 to a 3.3% deficit in 1993.

A similar picture emerges if we take the countries that were part of *the former Soviet Union (FSU).* According to IMF estimates, aggregate saving in the FSU declined from 32.1% of GDP in 1988 to 25.4% of GDP in 1993 (see graph 1)[4]. Aggregate investment, for its part, has fallen from 32.6% of GDP in 1989 to 23.2% of GDP in 1993. In contrast with what occurred in the CEEC, the aggregate saving–investment balance in the FSU improved (by 2.4 points of GDP) between 1988 and 1993, but it is tentatively estimated to have deteriorated again in 1994 reflecting a further sharp

GRAPH 4 : **Aggregate current account balance of transition countries** (1) (2)



(1) Including both Central and Eastern European countries and the NIS of the FSU.
(2) For 1994, estimates. For 1995 and 1996, projections.
Source: Organization for Economic Cooperation and Development (1994).

decline in saving ratios not offset by a continued reduction in investment ratios. Furthermore, the balance shows a clear deterioration if we compare the post–1989 period as a whole with the average of the 1980–88 period.

Graph 4 shows the evolution of the aggregate current account of *transition economies (Central and Eastern Europe plus the New Independent States of the FSU)* since 1977, as estimated by the OECD on the basis of balance of payments data. Three distinct periods can be observed. Between 1977 an 1981, the aggregate current account of the region was approximately in balance. Then, between 1982 and 1988, it swung into a substantial surplus. Finally, the reform period has been characterized by a deficit in the aggregate current account, with a very sharp deterioration in 1989–90 followed by a substantial correction in 1991 and a mild trend towards an increasing deficit since 1993. Aggregate data on the current account, therefore, confirm the picture obtained with the data on saving–investment balances[5].

II.2) Saving by sector

While, as noted, appropriate national account breakdowns of saving by main sector are in general not available, fiscal data, partial information on the evolution of enterprise profitability and data on households' income and expenditure indicate that the sharp decline of national saving ratios in transition countries (TC) is largely accounted for by the reduction in enterprise and public saving. Household saving ratios, by contrast, seem to be recovering in many countries from their very depressed pre–transition levels.

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3 In what follows, CEEC includes the Baltic states, the republics of the former Yugoslavia and Moldova, but excludes Russia, Ukraine and Belarus.

4 This followed a gradual reduction of aggregate saving during the 1980s from an estimated peak of 34.3% of GDP in 1983.

5 The current account data, however, show a higher surplus for the period 1982–88 than the saving–investment data seem to imply.

Enterprise saving

The decline of enterprise profits, which were the ultimate source of most saving under the socialist system, is the basic factor behind the reduction in aggregate saving ratios in TC. The collapse of the CMEA markets, cuts in state subsidies, the domestic recession and the sharp changes in relative prices that have accompanied the transition process have all had a very negative impact on corporate profitability. While several Central European countries (Poland, Hungary and the Czech Republic) have been experiencing since 1993 an improvement in enterprise saving as their economies have begun to strengthen, average profit margins remain at very low levels in most TC. These low levels of profitability often hide a dual situation, with large, state–controlled enterprises showing negative net savings (that is, losses after subtracting depreciation allowances) and some small and medium–sized enterprises in the emerging private sector enjoying high profit margins.

Public saving

As tables 1 and 2 show, TC have suffered an important decline of public saving since 1989, with public saving in fact turning negative in many of them. The reduction of public saving has been particularly sharp in Bulgaria, Albania and the NIS. In Albania (and probably in some NIS) the increase in public dissaving has even resulted in a negative national saving rate. Public saving in Central European countries is estimated to have declined on average from 5.1% of GDP in 1987 to –0.9% of GDP in 1993.

The contraction of public saving has been translated into substantial increases in the budget deficits despite the fact that, as explained below, public investment has also fallen in most countries. Table 3 shows the evolution of the general government balances in TC since the beginning of their pro–market reforms. The only countries that have not suffered a substantial deterioration of their budget balances are the Czech Republic, Slovenia and the Baltic countries, all of which have even been able to record budget surpluses at least for several years. In the Baltic countries, however, the good fiscal performance hides low and/or declining public saving rates coupled with low and/or declining public investment rates. In Central Europe the average budget deficit increased abruptly to around 9% of GDP in 1991–92 but has declined to around 5% of GDP in 1993–94. In the FSU the budgetary "explosion" began one year later but was even sharper, with the average budget deficit reaching more than 13% of GDP in 1992–93 (16.5 % of GDP if the Baltic countries are excluded).

The recession and the budgetary costs associated with structural reform are the main factors behind the decline in public saving. With government revenues under central–planning being dominated by taxes on enterprises (profit and turnover taxes, in particular), the compression of profit margins and the bankruptcy of many enterprises has resulted in a substantial erosion of the traditional tax bases. Most TC are implementing comprehensive tax reforms to move away from enterprise taxation and into taxation of personal income and consumption. But, in the short–term,

TABLE 3 : **General government balances** (1) (in percent of GDP)

	1989	1990	1991	1992	1993	1994	1995	1996
"Central Europe"								
Albania (2)	–	–	–43.7	–21.8	–16	–14	–13	–9
Bulgaria	–1.4	–12.7	–15.1	–14	–15.1	–7.8	–7	–4.1
Former CSFR	–2.4	0.1	–2	–3.3	–	–	–	–
Czech Republic	–	–	–	–	1.4	0.8	0.2	–0.3
Slovak Republic	–	–	–	–	–7.5	–3.7	–3.9	–4.9
Hungary	–1.3	0.5	–2.5	–5.5	–5.9	–7.1	–6.2	–5.6
Poland	–7.4	3.1	–6.5	–6.7	–2.9	–4.3	–3.4	–4.2
Romania	8.4	1.2	0.6	–4.6	–0.1	–1.1	–2	–2
Slovenia	0.3	–0.3	2.6	0.2	0.5	–1	–	–
Simple average "Central Europe"	–0.6	–1.4	–9.5	–8.0	–5.7	–4.8	–5.0	–4.3
Former Soviet Union								
Estonia	2.8	2.9	4.6	0.5	–1.4	0	–	–
Latvia	1	2	6.4	0	1	–2	–	–
Lithuania	–3.8	–3.7	4.9	0.7	–5.2	–4.9	–	–
Belarus	–	–	3.6	–4.5	–9.4	–15	–	–
Moldova	2.3	2.9	0	–21.1	–12.5	–6.8	–	–
Ukraine	–	–	–13.6	–29.3	–9.7	–9.1	–	–
Russia	–	–	–	–18.8	–8	–12	–	–
Armenia	–	–	–1.9	–30.6	–46.4	–	–	–
Azerbaijan	–	–	–5	–26.8	–14.4	–	–	–
Georgia	–	–	–3	–28	–34	–	–	–
Kazakhstan	0	1.4	–7.9	–7.3	–1.1	–4	–	–
Kyrgyz Republic	2.1	0.3	4.6	–13.5	–8.2	–4	–	–
Tajikistan (3)	2.5	4	–16.4	–29.9	–23.6	–8.9	–	–
Turkmenistan	–1.9	1.2	2.5	14.1	–3	–	–	–
Uzbekistan	–0.9	–1.1	–3.6	–13	–15.7	–10	–	–
Simple average FSU	0.5	1.1	–1.8	–13.8	–12.8	–7.0	–	–
Simple average FSU excluding Baltic states	0.7	1.5	–3.7	–17.4	–15.5	–8.7	–	–

(1) For 1994, preliminary estimates. For 1995 and 1996, forecasts.
(2) After grants, on a cash basis.
(3) Consolidated balance of the central government.
Sources: European Commission, EBRD, OECD , IMF, World Bank, and national data.

TABLE 4 : **Household saving ratios in selected transition countries** (in percent of disposable income)

	1985	1986	1987	1988	1989	1990	1991	1992	1993(1)
Bulgaria	–	–	–	–1	–5	–6	18	17	17.2
Estonia	–	–	–	–	–	7.9	16.8	–7	–
Former CSFR	3.6	4.2	4.3	3.7	3.5	–0.2	6.7	5.5	–
Czech Rep.	–	–	–	–	–	–	–	6.6	7.9
Slovak Rep.	–	–	–	–	–	–	–	3.3	3.5
Georgia (2)	10	7.6	–	–	13.8	16	17.4	38	–
Hungary	7.6	8.4	6.7	7.6	7	11.8	15.8	13.8	6.7
Lithuania	–	–	–	4.4	8.1	8.9	6.2	–	–
Poland	–	–	7.9	16.5	20.5	25.5	20.4	15.2	24.7
Romania	–	–	–	3.4	6.2	12.5	5.5	14.1	–
Russia	5.3	6.7	7.7	8.9	11.8	13.7	31.3	20.2	–
Average countries above (3)	6.6	6.7	6.7	6.2	8.2	10.3	15.2	15.5	12.0
Average OECD countries (3)	10.6	9.7	8.7	8.9	9.5	10.8	11.3	11.6	11.7

(1) For most countries preliminary estimates.
(2) Increase in households' saving deposits over disposable income.
(3) Simple arithmetic mean.
Sources: National data, IMF, World Bank.

the overhaul of the tax systems has tended to exacerbate the decline in government revenues by creating problems of disorganization and tax evasion. Tax collection has also been hampered by an expanding "grey economy" made up of numerous small–scale private entrepreneurs that operate unregistered. While explicit budgetary subsidies to consumers and enterprises have generally been trimmed, the budget has often continued to cover the growing losses of large state–owned enterprises, particularly in many republics of the FSU. This has sometimes taken place in an indirect and non–transparent way through off–budget funds or through operations to bail out the banking systems. The establishment of unemployment benefit systems and the increase in interest payments on the public debt are other important elements explaining the reduction in public saving in TC.

Household saving

Information on household disposable income and expenditure for several TC suggests that the transition process has so far had a positive impact on household saving ratios. Table 4 shows that in most of the countries for which this information is available household saving as a percentage of disposable income has risen significantly since 1989[6]. Thus, in the countries included in table 4, household saving has increased from a simple average of 6.6% of disposable income in 1985–88 (well below an OECD average of 9.5% for the same period) to 14.3% in 1991–93 (above an OCDE average of 11.5% for the same period).

An increase in the contribution of household saving to total national saving from its negligible pre–transition share is in fact what should be expected as TC move from a centrally–planned to a market economy. And this for two different reasons. First, as indicated in section I, with the transition to a capitalist system the share of households disposable income in total income should increase as the ownership of national wealth is, to a significant extent, transferred from the state to the private sector. Second, transition should tend to increase the portion of disposable income saved by households both because under a market economy the motives and opportunities for saving are reinforced and because of the specific uncertainties associated with transition itself. The following paragraphs elaborate on this second reason to expect an increased role of household saving in TC[7].

The main motives why households save are the desire to smooth consumption over the life–cycle (basically the need to save for retirement), the desire to leave bequests, and as a precautionary reserve against uncertainty. These motives for saving, however, were considerably attenuated in the socialist economies. The need to save for retirement was reduced by an almost universal state pension system which guaranteed the replacement of a relatively high proportion of pre–retirement earnings. The equally universal provision of education and the fact that the state owned most of the housing stock (a component of wealth which accounts for the bulk of the intergenerational transfers in Western countries) lessened the need to save for bequests. There was also a smaller need for precautionary saving since cyclical fluctuations of output rarely led to fluctuations of employment. Finally, the state–ownership of real assets and the underdevelopment of the financial markets meant that households had a very limited choice of instruments in which to place their savings. Practically the only financial assets available to households were saving deposits at saving banks which normally paid negative real rates of return.

6 The main exceptions are Slovakia, the Czech Republic and Hungary. Under the Czechoslovak federation, household saving remained within a range of only 3.5–5.5% of disposable income throughout most of the period of analysis, and even became slightly negative in 1990 reflecting strong household purchases in anticipation of the 1991 price liberalization. After the split of the federation, the household saving ratio has been close to the lower end of that range in Slovakia and has only recovered moderately in the Czech Republic. In Hungary, household saving increased dramatically in 1990–92 but fell again quite strongly in 1993 contributing to the deterioration suffered by the Hungarian current account in 1993–94.

7 This section draws on Ickes(1993).

On the other hand, there were some reasons for household saving in socialist economies that are not present (at least to the same extent) in market economies. Thus, given the absence of a consumer loan market, households had to accumulate cash to be able to finance purchases of consumer durables. In addition, rationing in the goods market provided a motive for precautionary saving which is absent in capitalist economies: the convenience of having cash at hand to take advantage of any temporary availability of the desired consumer goods. In some instances, price controls and excess demand situations may have also resulted in "forced saving" in the form of a "monetary overhang". Some economists have argued, for example, that forced saving partly explains the consistent rise in the Russian household saving ratio seen during the 1980s (see table 4)[8]. But, all in all, it remains true that the need and opportunities for household saving in socialist economies were limited compared to those prevailing in market economies.

By putting an end to the high degree of paternalistic protection provided by the socialist state against personal mishaps, the transition to a market economy should make consumers aware of their own need to save and, therefore, should tend to increase household saving ratios. Transition should also impact favourably household saving ratios by increasing uncertainty about income and employment, particularly during the early stages of the transition process, which are being characterized in most countries by recession and a sharp rise in unemployment. The emergence of new real and financial assets in which households may hold their wealth (privatization of the housing stock and the state enterprises, freedom to set up small family business, the possibility to invest in equity, bonds or the newly–created investment and pension funds, etc) and the increase in real interest rates on bank deposits to positive and attractive levels should also encourage savings. In addition, to the extent that transition leads, as it seems to be happening in several countries, to a more uneven income distribution, it will tend to increase household saving ratios by shifting income towards households with a higher propensity to save. The joint operation of all these different factors probably explains the increase in household saving ratios shown in table 4.

The fear that transition would lead to a temporary reduction of household saving ratios as households got rid of the monetary overhangs accumulated before 1989 has not been confirmed, at least with the limited statistical information currently available. Either, as some economist have argued, there was never such a monetary overhang or, more probably, it was much more limited than had been suggested and disappeared overnight when the price–jump associated with price liberalization eroded the real value of the money balances held by the population. Furthermore, any negative impact on household saving ratios arising from the elimination of the overhang may have been more than offset by the other factors at work that have tended to increase household saving in TC.

II.3) Investment by sector

For most transition countries, available sectoral breakdowns of total investment only distinguish government investment from non–government investment, with the latter being obtained as a residual. However, with household investment normally being of little importance (particularly in the pre–reform period), the evolution of non–government investment can be taken as a reasonable approximation for the trend in corporate investment.

Investment by enterprises

Corporate investment (proxied with non–government investment in tables 1 and 2) has fallen dramatically as a percentage of GDP in most TC since 1989. Table 1, for example, shows a decline in non–government investment in Central European countries from around 24% of GDP in 1987–90 to less than 14% of GDP in 1993. In certain countries, in particular Romania and Estonia, investment/GDP ratios have remained stable or even increased in spite of the fact that, like in the other TC, domestic investment has fallen sharply in real absolute terms between 1989 and 1993. But, apart from possible statistical deficiencies, this reflects the fact that consumption + net exports, and therefore GDP, have been falling even more sharply than investment. A drastic compression of real disposable income (as real wages have declined and unemployment have risen) and the collapse of the CMEA markets explain this. Also, in some countries (notably in Romania) the transition process has been accompanied by a strong build–up of enterprise stocks.

Why has corporate investment in TC fallen so much? The main reason is that to the usual negative impact of recession on enterprise investment has been added the negative implications of transition itself. When the central plan controls have been loosened but the state enterprises have not yet been privatized, enterprises fall into a sort of "no–man's land", sometimes called "pre–privatization limbo", where no real owners exist and managers have no incentives to invest. Managers often do not know whether they will continue in their posts after the enterprise is privatized and restructured. Even the future of the enterprise as such may be uncertain. Under this conditions, managers and workers are interested in grabbing whatever income or enterprise assets they can before they are forced to find alternative employment. Managers yield to wage pressures and use most income flow or even sell off machinery to pay for higher wages. "Asset–plundering" by managers is also common under these circumstances.

Transition also has a negative impact on enterprise investment because of the economic and political uncertainty it involves. Most investments have little value in alternative

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8 Other authors, however, have questioned the validity of the "monetary overhang hypothesis" on the basis of both empirical and theoretical arguments (including the existence of black markets). See, for example, E. Borensztein and P.J. Montiel (1991), pp. 16–19.

uses and can be considered, from the point of view of the investor, as a "sunk cost" that he will be unable to recover if things go wrong and he has to withdraw from the activity. Thus, even if the risk–return combination of the envisaged investment is attractive (as it is often the case in TC), the investor may find it optimal to wait and decide at a later stage whether to undertake the project. The cost of waiting is low and the benefit ("the option value of waiting"), should things take a turn for the worse, may be very high.

Starting in 1993 or 1994, however, corporate investment has began to recover both in absolute real terms and as a percentage of GDP in several Central European countries, notably in Poland, Hungary, the Czech Republic and Albania (see table 1).

Public investment

As tables 1 and 2 show, public investment has also been on a downward trend in most TC since the beginning of the reforms. Two warnings, however, must be given on the reliability of the data on public investment presented in these tables. For the pre–transition period and for several countries, the statistics shown in tables 1 and 2 may include investment actually undertaken not by the state but by state enterprises, which would exaggerate the downward tendency in public investment recorded since 1989. Second, in several countries public investment is overstated (both in the pre–transition and the post–transition figures) because the data also include capital transfers from the state.

Despite the apparent downward trend since 1989, public investment/GDP ratios remain on average at approximately the levels normally seen in industrial countries. Thus, for those countries for which a basic sectoral breakdown of investment is available, the average public investment/GDP ratio was 3.6% in 1993, exactly the same as the average ratio in industrial countries in that same year, and somewhat above the ratio of the European Union (3.2%).

III. THE PROBLEM OF THE ALLOCATION OF SAVING

Saving in TC not only has declined sharply but, in a large number of countries, is mostly absorbed by the state to finance its public investment and its dissaving, resulting in the crowding out of private investment. Furthermore, the small part that is not absorbed by the state is to a considerable extent channelled by the financial system to loss–making enterprises and sectors, or goes to finance suboptimal investments. Most private saving is intermediated by inefficient banking sectors which are saddled with bad loans, are largely controlled by the state, and lack competition and adequate credit–risk assessment skills. In this context, non–performing loans are often rolled–over automatically to large, loss–making state–owned enterprises, while commercial bank financing is severely restricted for (normally small and medium sized) promising private enterprises.

The combination of high budget deficits and weak and inefficient financial systems in effect means that a large share of the scarce pool of private saving in TC is used to finance dissaving by the government and loss–making enterprises. This not only provides a further explanation for the collapse of enterprise investment since 1989 (since loss–making enterprises often invest little, at least relative to their size), but also tends to perpetuate low average profitability and, therefore, a low rate of saving in the enterprise sector.

IV. THE IMPACT OF POPULATION AGEING ON SAVING

In a development similar to that observed in most Western countries, low and falling birth rates are increasing the ratio of elderly people to the working age population in TC. As table 5 shows, the ratio of pensioners to employed people has been rising in all TC since the reforms began. Furthermore, with the exception of some of the Central Asian republics of the FSU, both the share of elderly people over total population and overall dependency ratios in TC are projected to continue increasing steeply over the coming years and decades.

TABLE 5 : **Old–age economic dependency ratios in transition economies**[1]

	1985	1990	1991	1992	1993
"Central Europe"					
Albania	18	22	28	38	45
Bulgaria	50	58	68	80	86
Croatia	–	38	45	57	–
Czech Republic	54	55	59	61	–
Hungary	–	55	57	64	63
Poland	36	43	51	57	–
Romania	18	22	26	29	31
Slovak Republic	–	51	61	67	–
Simple average "Central Europe"	35	42	48	55	56
Former Soviet Union					
Estonia	43	48	–	54	–
Latvia	40	43	46	48	52
Lithuania	41	47	48	49	48
Belarus	42	46	49	52	55
Moldova	35	41	41	44	45
Russia	42	45	47	51	52
Ukraine	47	52	54	59	62
Armenia	28	34	35	41	46
Azerbaijan	34	40	44	39	41
Georgia	37	38	45	54	–
Kazakhstan	31	33	35	38	40
Kyrgyz Republic	34	35	36	35	36
Tajikistan	27	27	29	31	33
Turkmenistan	25	25	28	28	28
Uzbekistan	30	30	30	32	33
Simple average FSU	36	39	41	44	44

(1) Ratio of pensioners to employed persons, in percent.
Source: International Monetary Fund (1994).

Table 7 displays World Bank data and projections for the percentage of the population over 60 years old in TC and in other main groups of countries for the period 1990–2030.

This table shows that TC and OECD countries had by far the oldest populations in the world in 1990, with an average share of people over 60 years about three times higher than in the other regions of the world. It also shows that the share is expected to rise in TC from a weighted average of 15.3% in 1990 to 22.7% in 2030. Although the projected ageing of the population in TC is not as fast as in the OECD countries or in Latin America, the population of TC (particularly if the Central Asian republics of the FSU are excluded) will continue to have in the year 2030 a much higher share of elderly people than all other country groupings except the OECD countries.

TABLE 6 : **Overall dependency ratios in transition and Western European countries(1)**

	Actual 1990 dependency ratio	Projected(2) 2030 dependency ratio
CEEC (3)	52.5	60.3
Russia +Ukraine +Belarus+ Moldova	53.9	63.9
EU–12	48.5	71.3
EFTA–6	50.6	73.2
Total CEEC + European FSU	53.4	62.6
Total EU–12 + EFTA–6	48.7	71.5

(1) Ratio of non–working age population (ages 0–14 and over 64) to working age population, in percent.
(2) As projected by the World Bank (World Population Projections, 1992–93).
(3) Albania, Croatia, the Baltic states, Bulgaria, the Czech Republic, Hungary, Poland, Slovakia, Slovenia and Romania.
Source: Baldwin (1994)

Table 6 indicates that the economic burden associated with the ageing of the population in TC will not be offset by a decrease in the share of the dependent young to the population. This table shows that also the overall dependency ratios, that is, the ratio of non–working age population (ages 0–14 and over 64) to the working age population, will increase substantially between 1990 and 2030 (although, again, less rapidly than in Western countries).

The expected rapid increase in the overall demographic dependency ratios in TC from their already high present levels can have important negative implications for both public and household saving ratios. Current public pension systems in TC are of a pay–as–you go nature, and often have overly generous wage replacement rates and liberal early retirement and disability provisions. Therefore, unless public pensions are reformed and alternative pensions schemes are developed (see section VI), this will impose a further burden on the already overwhelmed public pension systems, limiting any increase in public saving that may stem from economic recovery and successful enterprise and financial restructuring.

The projected ageing of the population of TC may also have a negative effect on household saving since the elderly tend to have a low, or even negative, saving rate. This could be particularly true in TC since population ageing in these countries is basically due to low and declining birth rates, rather than to a lengthening of the life expectancy. When ageing is also due to a lengthening of the life expectancy, the negative impact on household saving resulting from the increase in the share of old people may be offset (at least partly) by the positive effect of a longer expected retirement period on saving by middle–age households. But very few TC are experiencing an increase in their life expectancies. In fact, life expectancy seems to have decreased in several TC (particularly in Russia) since the beginning of the pro–market reforms, probably reflecting economic and political instability and increased income inequality[9]. The possible negative effect of ageing on private saving, however, will be attenuated if people anticipate that the government will in the future increase taxes or curb pension benefits to ensure the sustainability of the pension system.

TABLE 7 : **Percentage of population over sixty years old in transition countries (1990–2030)**

	1990	2000	2010	2020	2030
"Central Europe"					
Albania	8.1	9.7	11.4	14.9	19.1
Bulgaria	19.7	22.8	24.9	26.3	26.7
Croatia	17.8	21.2	23.9	26.9	28.7
Czech Republic	16.9	16.9	19.2	22.6	24
Hungary	19.3	20.9	23.1	26.7	26.8
Poland	14.8	16.2	17.5	22.2	23.3
Romania	15.6	17.8	17.9	20.2	21.9
Slovenia	16.2	19.4	22.7	26.5	29.1
Yugoslavia, Fed. Rep. of	13.6	17.3	18.8	22.2	24.9
Simple average "Central Europe"	15.8	18.0	19.9	23.2	24.9
Former Soviet Union					
Estonia	17.2	19	20.8	23.6	25.1
Latvia	17.9	20	21.2	24.2	25.9
Lithuania	16.2	18.2	19.7	23.5	26.3
Belarus	17.6	19.4	20.5	24.1	25.3
Moldova	12.5	13.8	14.7	17.3	17.8
Russia	16.5	18.7	20.5	24.4	24.9
Ukraine	18.7	21.3	22.1	24.5	25.5
Armenia	11	13.4	14.5	19.6	22.1
Azerbaijan	9	10.9	11.3	15.9	19.9
Georgia	15.9	18.2	18.9	22.3	24.4
Kazakhstan	9.5	11.5	12.9	16.7	18.8
Kyrgyz Republic	8.5	8.7	8.8	11.8	14.2
Tajikistan	6.2	6.2	6	8.2	10.8
Turkmenistan	6.3	6.5	7	10.2	13.1
Uzbekistan	6.5	6.7	7	10.2	13.2
Simple average FSU	12.6	14.2	15.1	18.4	20.5
Simple average "Central Europe" + FSU	13.8	15.6	16.9	20.2	22.2
Weighted average "Central Europe" + FSU	15.3	17	18.2	21.5	22.7
Memorandum items:					
OECD (1)	18.2	19.9	23.1	27	30.7
Latin America and Caribbean (1)	6.9	7.7	9.3	12.2	16
Middle East and North Africa (1)	5.7	6	6.5	8	9.8
Sub–Sahara Africa (1)	4.6	4.4	4.5	4.9	5.9

(1) Weighted average.
Source: World Bank (1994).

9 See "Eastern European Demography: Of Death and Dying", *The Economist*, 7 January 1994, pp.27–28, and "Former Soviet Countries Face Population Crisis, Study Asserts", *The Wall Street Journal*, 13–14 January 1994.

V. PROSPECTS: HOW WILL GROWTH BE FINANCED?

The successful transformation of the formerly planned economies of Europe and Asia into market economies will require substantial amounts of new investment in the next 15–20 years. The question that it is often posed is where the savings necessary to finance such investment will come from. More specifically, will the saving come primarily from new demands on the international capital markets, or will TC rely mainly on internally generated saving?

In recent years, both economic studies and statements by policy–makers have warned about the risk that the combination of low saving ratios and huge investment needs in TC may significantly add to upward pressures on global real interest rates in the coming years. This danger, however, is probably overstated. While external capital is playing and is likely to continue playing in the future an important role in the transition process, the experience of other countries suggests that future investment in TC is likely to be mostly financed by domestic savings. Starting with work by Feldstein and Horioka (1980), econometric studies have generally found that there continues to be (despite the important increase in the international mobility of financial capital since the 1960s) a very high degree of correlation between national saving and investment rates, and this seems to hold both for industrial and developing countries[10]. To put some examples, the post–war recoveries in Europe and Japan, and the high rates of investment experienced by Spain in the 1960s and by the new industrialized countries of Asia in the last three decades, have all been accompanied by high rates of domestic saving.

The fear that TC will exert an excessive pressure on world capital markets reflects both an exaggeration of the likely increase in their investment demand in the coming years and a failure to recognize the capacity of those countries' domestic saving rates to recover as their economies strengthen. Let us look at each of these elements in turn.

Many of the estimates made in the past of the *investment needs* of TC have been based on the assumption that TC catch–up with Western per capita income levels or capital/output ratios within a specified, and often relatively short, period of time. It is not a wonder, therefore, that those studies have normally arrived at staggeringly high investment needs for the area[11]. This approach, however, has serious deficiencies. Not only does it assume ambitious catching–up scenarios but tends to confuse investment needs with actual investment demand. As discussed in section II, while investment/GDP ratios are beginning to recover in those TC that have made more progress in stabilization and reform, in many TC (particularly among the republics of the FSU) the recovery of investment will continue to be held up in the coming years by political uncertainty, macroeconomic instability and insufficient progress in the area of structural transformation.

Furthermore, TC may be able, at least during an initial period, to sustain high rates of growth with relatively moderate ratios of investment to GDP. The inefficiency of past investment patterns, and the fact that a considerable fraction of the capital stock inherited from the socialist period will be of little value under a market economy, mean that there is a relative shortage of *useful* productive capital in TC. This will tend to make investment in TC very productive, at least initially. Thus, Borensztein and Montiel (1991) estimated that during the first ten years of transition Hungary, Poland and the former Czechoslovakia could sustain rates of growth of between 4 and 7% of GDP with an investment/GDP ratio of only 22% (which is close to the world average).

Regarding *saving*, the low current rates of saving in TC reflect to a considerable extent the recession and the initial difficulties linked to the process of systemic transformation. As transition economies gradually strengthen and enterprise and financial sector restructuring proceeds, domestic saving ratios are bound to increase. This is particularly clear in the case of corporate saving, since enterprise profitability is likely to improve quickly with the cyclical conditions of the economy. Other things being constant, economic recovery and structural progress will also tend to increase public saving, both by increasing revenues and by reducing unemployment benefits and (explicit and implicit) subsidies to loss–making enterprises and banks. Finally, as the life–cycle theory of saving suggests, higher economic growth may have a positive impact on household saving by increasing the gap between the lifetime income of current workers and that of retired workers. The positive influence of economic expansion and structural reform on public and household saving, however, may be offset, at least partially, by the demographic developments discussed above unless governments in TC move fast to develop multi–pillar pension systems.

TABLE 8 : **European Commission forecasts for associated countries**(1)

	1993	1994	1995	1996
Real GDP growth	1	3.1	3.2	3.8
Fixed investment growth (in real terms)	–1.3	8.5	6.4	9
Unemployment rate	12.7	13	13.4	13.5
Private consumption deflator	55.6	41.6	22	16.3
General government balance (in percent of GDP)	–3.7	–4	–3.5	–3.9
Current account balance (in percent of GDP)	–4	–2.7	–2.6	–2.6
Household saving rate (2) (in percent of disposable income)	10	9.3	7.7	8

(1) Weighted averages of forecasts for Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia.
(2) Excludes Romania.
Source: General Directorate for Economic and Financial Affairs, European Commission. December 1994.

10 Goldstein and Mussa (1993) provide an interesting survey of the literature on saving and investment correlations.

11 Collins and Rodrik (1991) discuss this and other approaches followed in different studies that have attempted to measure the investment needs of TC. Assuming a scenario of partial catching–up with EU's per capita income levels by the year 2002, Boote (1992) also concludes that TC will require very high investment rates unless the efficiency of investment is radically improved.

The bulk of the rise in saving necessary to finance higher investment in TC is, therefore, likely to come from increased corporate savings. Indeed, as in most of the successful economies, much of the new investments undertaken by private enterprises will be directly financed with retained profits. Mayer (1989), for example, found that retained earnings accounted for more than 65% of the gross financing of non–financial enterprises in the UK and the US over the period 1970–85. The latest economic forecasts for CEEC made by the Commission services are also consistent with the view that corporate saving will play a predominant role as a source of finance for future investment growth in TC. Table 8 shows the aggregate Commission forecasts for the main macroeconomic variables. The forecasts refer only to those CEEC that have signed association agreements with the EU and cover the period 1994–96. They foresee stable average budget and current account deficits as a percentage of GDP, which can reasonably be taken to imply a stable rate of public saving and a constant rate of reliance on foreign saving. The forecasts also show some reduction in the average household saving ratio, and a clear recovery of domestic investment leading to an increase in investment/GDP ratios. Now, since public, foreign and household saving ratios are expected to remain constant (or decline moderately), the forecasts imply that the expected rise in the investment ratios will be financed with a corresponding increase in corporate saving ratios.

But perhaps the most robust piece of evidence suggesting that the recovery of investment/GDP ratios in TC will largely be financed by an increase in domestic saving, and in particular corporate saving, is the recent experience of the most advanced Central European countries. As table 1 shows, the recovery experienced by corporate investment ratios in the Czech Republic, Poland and Hungary in 1993–94 has been largely self–financed through an improvement in enterprise profitability.

The previous analysis, however, should not be taken to mean that external capital will not play an important role in the financing of investment growth in TC. Even if the average current account deficit of the "associated countries" remains at present levels, as the Commission forecasts, it will still imply an inflow of foreign saving of about 3% of GDP per year. The forecasts for all CEEC contained in the IMF World Economic Outlook of October 1994 tell a similar story (see graphs 1 and 2): average saving and investment ratios of CEEC are both projected to increase by 1% of GDP between 1993 and 1995, leaving a 3.3% of GDP gap to be covered by foreign capital. Moreover, it is perfectly possible that the recovery of domestic saving will lag somewhat behind that of domestic investment (for example, if the governments of those countries use increased revenues from growth to finance discretionary increases in expenditure programmes).

Official external capital flows, in particular, will continue to play a vital role in TC, specially during the early stages of the transformation process. Conditional official assistance linked to sensible reform programs will not only contribute directly to cover the gap between domestic saving and investment but will also act as a catalyst for domestic and foreign investment by reducing uncertainty and increasing the chances that the reforms will succeed. As systemic transformation proceeds, those countries with a stable macroeconomic framework should be able to increasingly rely (as some are already doing) on private capital inflows to cover the current account gap and any debt repayments. Since the average investment–saving gap is likely to remain in the order of 2–4% of GDP for many years to come, the external capital needs of TC will no doubt continue to put some upward pressure on global real interest rates. But the main point of this section is that, since the bulk of the foreseeable increase in domestic investment will be mostly financed by an increase in domestic saving, such pressure will be much less important than it has often been claimed.

TABLE 9 : **Saving and investment ratios in developing countries classified by financial criteria** (in percent of GDP)

	1977–81	1982–86	1987	1988	1989	1990	1991	1992	1993	1994
Market borrowers										
Saving	25.2	25	29.3	29.5	29.5	30	29.2	28.3	28.3	28.4
Investment	28.3	26.5	28.8	29.9	29.9	29.3	29.2	30.6	30.6	30.5
Official borrowers										
Saving	19.5	13.8	14.4	13.8	14.2	15.6	15.5	14.2	13.5	14.5
Investment	24	18.8	18.7	18	18.5	17.9	17.8	17.9	17.5	18
Countries with recent debt–servicing difficulties										
Saving	22.6	16.6	18.5	18.3	18.9	18.2	17.1	16.6	16.1	16.8
Investment	25.7	20	20.3	20.6	20.7	19.3	18.9	19.4	19.3	19.7
Countries without debt–servicing difficulties										
Saving	25.5	25.9	29.3	29.5	29.4	29.9	30.4	31	29.1	29.1
Investment	27.2	28	29.6	30.3	30.6	30.5	30.6	31.6	31.2	30.9
All developing countries										
Saving	25.4	21.9	24.6	24.6	25.1	25.3	24.4	25.3	24.1	24.6
Investment	26.4	24.2	25.2	25.9	26.2	25.8	25.9	27	26.6	26.8

(1) Excluding transition countries. See IMF (1994) for a precise definition of the different country groupings presented in the table.
Source: IMF (1994).

VI. POSSIBLE POLICY MEASURES FOR INCREASING THE LEVEL AND IMPROVING THE ALLOCATION OF SAVING

VI.1) General policy recommendations

The authorities should pursue policies conducive to a stable macroeconomic framework and sustainable growth. Not only economic growth leads, as noted in the previous section, to higher saving ratios, but empirical evidence on developing countries[12] indicates that those countries that have managed to keep low inflation rates and low levels of foreign indebtedness have tended to display higher national saving rates than those that did not. In addition, those countries that succeeded in keeping their macroeconomic house in order received more foreign direct investment and enjoyed a higher degree of access to the international capital markets. In other words, countries that applied prudent economic policies not only were able to have higher national saving but were also able to obtain a higher amount of foreign saving.

Table 9 illustrates some of these regularities by displaying data on saving and investment ratios for different groups of developing countries classified by financial criteria. The figures have been obtained from the IMF World Economic Outlook of October 1994. They show that developing countries with debt servicing difficulties have tended to have much lower saving ratios than those without foreign debt problems. It also indicates that countries with good access to the international capital markets ("market borrowers") have had on average much higher saving and investment ratios than those which largely depended on official assistance ("official borrowers"). While table 9 says nothing about the direction of causality (which is likely to operate in both ways), it is consistent with the idea that countries that apply sound economic policies tend to have higher national saving rates and that countries with high national saving rates tend to have easier access to foreign sources of saving.

VI.2) Monetary policy

Monetary policy can play a significant role not only by ensuring, in conjunction with fiscal policy, price stability and a sustainable current account, but also by guaranteeing (in combination with the liberalization of domestic interest rates) a positive and sufficiently attractive real remuneration for depositors. Avoiding negative real interest rates may raise the overall level of private saving and, perhaps more importantly, can prevent the channeling of scarce domestic saving abroad (for example, in the form of capital flight). It can also prevent the channeling of domestic saving away from the banking system or organized markets and into informal, and normally less efficient, domestic financial markets.

VI.3) Fiscal measures

Increasing public saving is probably the safest and most direct way in which the authorities in TC can have a positive impact on aggregate saving. Governments in TC should be extremely careful with the short–term fiscal costs of any tax reform aimed at encouraging household saving. As the experience of other countries seems to show[13], while the impact of tax incentives on household saving is at best moderate and of a medium–term nature, their fiscal costs can be quite important. In trying to encourage household saving, therefore, the government may reduce (particularly in the short–term) both public saving and national saving.

A given increase in public saving is likely to have a larger effect on national saving if it is achieved through cuts in current expenditure than if it is done through an equivalent increase in taxes. This is because tax increases reduce households' disposable income and, therefore, lead to both lower consumption and lower saving by households (regardless of what happens to the household saving ratio). Even if it is achieved through cuts in public expenditure, an increase in public saving is likely to be offset to some extent by a reduction in private saving as households anticipate higher future taxes. However, the empirical literature on the Ricardian equivalence hypothesis mostly finds that this compensation is only partial. Furthermore, not even a partial Ricardian reaction by consumers will take place if the increase in public saving was to be accompanied by an equivalent increase in public investment, or if both taxes and public investment were increased in the same amount, leaving the budget deficit unchanged.

The authorities of TC should avoid making interest expenses on consumer borrowing deductible for tax purposes, except perhaps in the case of house mortgages. Indiscriminate tax deductibility for consumer interest not only lowers government saving but may also reduce household saving by incentivating current consumption. Tax–favoured mortgages may encourage household saving by encouraging investment in housing. But they can lead to an overinvestment in housing to the detriment of productive, non–residential investment. Furthermore, they may actually reduce household saving if the regulations do not prevent the use of mortgage credit to finance purchases of consumer goods and/or if (as, for example, in Sweden in 1980s) they increase households' wealth by contributing to a boom in house prices.

There is some evidence for industrial countries that tax deductibility of consumer interest, particularly when coupled with financial liberalization, has had a negative impact on national saving[14]. Given that TC are developing the previously inexistent consumer loan markets, granting interest deductibility for consumer borrowing clearly risks having, particularly in the short run, a negative impact on national saving in those countries.

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12 See, for example, Aghevli and others (1990), pp.35–38.

13 See, for example, B. Bosworth (1991) and Engen, Gale and Scholz (1994).

14 See, for example, Tanzi (1988), quoted by Aghevli and others (1990), and Carroll and Summers (1987).

VI.4) Financial sector measures

Recapitalizing and strengthening the balance–sheets of commercial and saving banks of TC and increasing competition among them would stimulate both saving and investment by allowing a reduction in their large lending–deposit spreads. Stronger, more efficient and less state–controlled banking sectors would also improve the allocation of saving among alternative investment projects and borrowers. Over the medium run, this would tend to increase corporate saving by eliminating the implicit subsidization of loss–making enterprises through the roll–over of non–performing loans and by facilitating the emergence of high–profit enterprises in the new private sector.

The development of modern, diversified and liquid capital markets would also have positive implications for both the level and the allocation of saving in TC. In particular, by increasing the number of financial instruments in which households may place their savings, it could stimulate household saving. In this respect, it is also important that interest rates be liberalized.

Finally, a financial sector–fiscal measure that could have a positive effect both on private saving and, in the future, on public saving is the reform of the public pension systems. The current, pay–as–you–go public pension systems should be reformed and downsized, and complementary private pension schemes should be developed based on the principle of full funding. As noted in section IV, this is particularly urgent given that TC, like OECD countries, are confronted with high and rapidly rising dependency ratios. In a recent study on the implications of the ageing of the world population, the World Bank (1994) has proposed the development of pension systems consisting of three pillars: a mandatory, tax–financed public pillar with the limited objective of alleviating old age poverty; a mandatory, privately managed and fully funded pillar (for example, in the form of occupational plans offered by enterprises); and a "voluntary pillar" for people wishing to have extra protection after retirement[15]. The creation of private pension systems, in turn, provides a further justification for the modernization of the capital markets since these markets will have to meet the sophisticated investment requirements of private pension funds.

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15 The World Bank study also discusses how countries should move from a pay–as–you–go public system to such a multi–pillar structure.

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20 June 1995

Principal economic policy measures – May 1995

Community (EUR–15)

17.5 The Commission publishes its new economic forecasts.

31.5 The Commission adopts its recommendation for the Broad Guidelines of the Economic policies of the Member States and the Community.

31.5 The Commission adopts its green paper on the practical arrangements for the introduction of the single currency.

Belgium (B)

15.5 The central bank decides to cut two of its key interest rates from the same date. It reduces the central rate from 4.75% to 4.50% and the rate on advances within the ceiling from 6.25% to 6%. The discount rate remains unchanged at 4.%.

Denmark (DK)

18.5 The central bank cuts the repo rate from 6.5% to 6.35%.

Germany (D)

None.

Greece (GR)

None.

Spain (E)

6.5 The Spanish government approves the establishment of private, non–profit placement agencies: they will cooperate with the public employment service (INEM) and the "Servicios Integrados para el empleo", which provide information and training for the unemployed.

France

None.

Ireland (IRL)

None.

Italy (I)

8.5 An agreement between the government and the unions is reached over the reform of the pension system, under which there will be a closer relationship between contribution and benefits, life expectancy will be assessed on retirement, and the treatment of different categories will be standardized. The new system will apply in full to new workers and only partially to workers with fewer than 18 years' contributions. Workers with more than 18 years' contributions will continue under the present system with some loss of benefits for early retirement.

26.5 The Bank of Italy raises the discount rate from 8.25% to 9% (75 basis points) with effect from 29 May. The rate applied to fixed–term advances is raised from 9.75% to 10.5%. 30.5 The government approves the Document for Economic and Financial Planning (DPEF) and proposes tough financial targets for 1996–98 with a call for a package of budget savings of LIT 32.5 trillion for 1996.

31.5 The Minister for Public Works and the Environment presents – and Parliament approves – a Decree Law on the new rules for public works contracts. The Decree Law has been approved one year after the entry into force of the Legge Merloni, which contributed substantially to the sluggishness of construction investment last year.

Luxembourg (L)

None.

Netherlands (NL)

9.5 The central bank decides to cut its rate on special advances by 0.1 percentage point, from 4.4% to 4.3%. The central rate remains unchanged at 4%.

30.5 The central bank decides to cut its rate on special advances by 0.1 percentage point, from 4.3% to 4.2%. The central rate remains unchanged at 4%.

Portugal (P)

None.

Austria (A)

16.5 The Austrian government approves its convergence programme, which aims to reduce the general government deficit to 3% of GDP by 1997.

Portugal (P)

None.

Finland (FIN)

None.

Sweden (S)

None.

United Kingdom (UK)

None.

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